

Rod SWARZ

1641SWARZ

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RAW SEQUENCE LISTING
PATENT APPLICATION US/08/913,430B

DATE: 09/24/1999
TIME: 08:52:01

Input Set: H913430B.RAW

This Raw Listing contains the General Information
Section and up to first 5 pages.

1 <110> APPLICANT: Walker, John
2 Lee, Rogan
3 Dougherty, Stephen W.
4 <120> TITLE OF INVENTION: Antigen Composition Against Mycoplasma
5 <130> FILE REFERENCE: U-011415-0
6 <140> CURRENT APPLICATION NUMBER: US/08/913,430B
7 <141> CURRENT FILING DATE: 1997-12-09
8 <150> EARLIER APPLICATION NUMBER: PCT/AU96/00149
9 <151> EARLIER FILING DATE: 1996-03-15
10 <150> EARLIER APPLICATION NUMBER: PN 1789
11 <151> EARLIER FILING DATE: 1995-03-16
12 <160> NUMBER OF SEQ ID NOS: 18
13 <170> SOFTWARE: PatentIn Ver. 2.0 - beta
14 <210> SEQ ID NO 1
15 <211> LENGTH: 1782
16 <212> TYPE: DNA
17 <213> ORGANISM: Mycoplasma hyopneumoniae
18 <400> SEQUENCE: 1
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20 tttcttcatt tgcgccagaa ttttaagaa ttagtacatt aaaaagttaga acaaaagttt 120
21 ttaatgtaaa cattagcgca atccttaaga aaaaattaaa agtttatct atttttttta 180
22 atcgaaatcc aaccaggcat aaatcttgt cagtatttat caagtcggta ttttttcatt 240
23 atttctacta aaatattatt tgaatttgca tttccataaa tctaaaattt tacattttt 300
24 tataacaatt tttaaaaaatt actcttaat ttatagtatt tttttatattt ttagtctaaa 360
25 ttataaaaatt atcttgaatt ttatttgaat ttttataatt tagtactaaa aaatacaaat 420
26 atttttcctt attctaagaa aaattcattt tttaaaaaaaa attgattttt atagtataat 480
27 ttgtttgtat aattgaatta acttgattt gaaaggaaaca aaatgaaaaa aatgcttaga 540
28 aaaaaattct tttttttttt gcaacttcgc ttgcattttt tattttttttt 600
29 gttgcagcag gttgtggaca gacagaatca ggttcaattt ctgattctaa accacaagcc 660
30 gagacgctaa aacataaaagt aagtaatgat tctattcgaat tagcactaac cgatccggat 720
31 aatcctcgat gaatttagtgc ccaaaaagat attatttctt atgttgatga aacagaggca 780
32 gcaacttcaa caattacaaa aaaccaggat gcacaaaata actgactcac tcagcaagct 840
33 aatttaagcc cagcgccaaa aggattattt attgccccctt aaaaatgaaag tggagttgga 900
34 actgctgtta atacaattgc tgataaagga attccgattt ttgcctatga tcgactaatt 960
35 actggatctg ataaatatga ttgttatgtt tcttttgcattt atgaaaaagt tggtaattttt 1020
36 caaggctttt caacttgcgc gggcttattt ggaaaaagaag atggctttt tgattcaattt 1080
37 gatcaaatga atgaatatct aaaatcacat atgcccccaag agacaatttc tttttataca 1140
38 atcgcgggtt cccaagatga taataattcc caatattttt ataatggtgc aatgaaagta 1200
39 cttaaagaat taatgaaaaaa ttgcaaaaat aaaataattt atttatctcc tgaaggcgaa 1260
40 aatgctgtttt atgtcccagg atgaaattat ggaactgcccgtt gtcaaaagaat ccaatctttt 1320
41 ctaacaatta acaaagatcc agcagggtgtt aataaaatca aagctgttgg ttcaaaacca 1380
42 gcttctattt tcaaaggatt ttgcggccaa aatgatggaa tggccgaaca agcaatcacc 1440
43 aaattaaaac ttgaagggtt tgataccaa aaaatctttt taactcgtca agattataat 1500
44 gataaaagcca aaacttttat caaagacggc gatcaaaata tgacaattta taaacctgtat 1560

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45 aaagttag gaaaagttgc tggtgaagtt cttcggttt taattgcaaa gaaaaataaa 1620
 46 gcatctagat cagaagtcga aaacgaaacta aagcaaaac taccaaatat ttcatttaaa 1680
 47 tatgataatc aaacatataa agtacaaggtaaaaatatta atacaatttt agtaagtcca 1740
 48 gtaattgtta caaaagctaa tggtgataat cctgatgcct aa 1782
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 50 <211> LENGTH: 419
 51 <212> TYPE: PRT
 52 <213> ORGANISM: Mycoplasma hyopneumoniae
 53 <400> SEQUENCE: 2
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 5 10 15
 Ala Thr Ser Leu Ala Ser Ile Ile Ala Phe Val Ala Ala Gly Cys Gly
 20 25 30
 Gln Thr Glu Ser Gly Ser Thr Ser Asp Ser Lys Pro Gln Ala Glu Thr
 35 40 45
 Leu Lys His Lys Val Ser Asn Asp Ser Ile Arg Ile Ala Leu Thr Asp
 50 55 60
 Pro Asp Asn Pro Arg Trp Ile Ser Ala Gln Lys Asp Ile Ile Ser Tyr
 65 70 75 80
 Val Asp Glu Thr Glu Ala Ala Thr Ser Thr Ile Thr Lys Asn Gln Asp
 85 90 95
 Ala Gln Asn Asn Trp Leu Thr Gln Gln Ala Asn Leu Ser Pro Ala Pro
 100 105 110
 Lys Gly Phe Ile Ile Ala Pro Glu Asn Gly Ser Gly Val Gly Thr Ala
 115 120 125
 Val Asn Thr Ile Ala Asp Lys Gly Ile Pro Ile Val Ala Tyr Asp Arg
 130 135 140
 Leu Ile Thr Gly Ser Asp Lys Tyr Asp Trp Tyr Val Ser Phe Asp Asn
 145 150 155 160
 Glu Lys Val Gly Glu Leu Gln Gly Leu Ser Leu Ala Ala Gly Leu Leu
 165 170 175
 Gly Lys Glu Asp Gly Ala Phe Asp Ser Ile Asp Gln Met Asn Glu Tyr
 180 185 190
 Leu Lys Ser His Met Pro Gln Glu Thr Ile Ser Phe Tyr Thr Ile Ala
 195 200 205
 Gly Ser Gln Asp Asp Asn Asn Ser Gln Tyr Phe Tyr Asn Gly Ala Met
 210 215 220
 Lys Val Leu Lys Glu Leu Met Lys Asn Ser Gln Asn Lys Ile Ile Asp
 225 230 235 240
 Leu Ser Pro Glu Gly Glu Asn Ala Val Tyr Val Pro Gly Trp Asn Tyr
 245 250 255
 Gly Thr Ala Gly Gln Arg Ile Gln Ser Phe Leu Thr Ile Asn Lys Asp
 260 265 270
 Pro Ala Gly Gly Asn Lys Ile Lys Ala Val Gly Ser Lys Pro Ala Ser
 275 280 285
 Ile Phe Lys Gly Phe Leu Ala Pro Asn Asp Gly Met Ala Glu Gln Ala
 290 295 300
 Ile Thr Lys Leu Lys Leu Glu Gly Phe Asp Thr Gln Lys Ile Phe Val
 305 310 315 320
 Thr Arg Gln Asp Tyr Asn Asp Lys Ala Lys Thr Phe Ile Lys Asp Gly

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Input Set: H913430B.RAW

95 325 330 335
 96 Asp Gln Asn Met Thr Ile Tyr Lys Pro Asp Lys Val Leu Gly Lys Val
 97 340 345 350
 98 Ala Val Glu Val Leu Arg Val Leu Ile Ala Lys Lys Asn Lys Ala Ser
 99 355 360 365
 100 Arg Ser Glu Val Glu Asn Glu Leu Lys Ala Lys Leu Pro Asn Ile Ser
 101 370 375 380
 102 Phe Lys Tyr Asp Asn Gln Thr Tyr Lys Val Gln Gly Lys Asn Ile Asn
 103 385 390 395 400
 104 Thr Ile Leu Val Ser Pro Val Ile Val Thr Lys Ala Asn Val Asp Asn
 105 405 410 415
 106 Pro Asp Ala
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 108 <211> LENGTH: 25
 109 <212> TYPE: PRT
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 111 <220> FEATURE:
 112 <221> NAME/KEY: Unsure
 113 <222> LOCATION: (3)
 114 <223> OTHER INFORMATION: Undetermined
 115 <400> SEQUENCE: 3
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 117 5 10 15
 118 Gln Ala Glu Thr Leu Lys His Lys Val
 119 20 25
 120 <210> SEQ ID NO 4
 121 <211> LENGTH: 29
 122 <212> TYPE: PRT
 123 <213> ORGANISM: Mycoplasma hyopneumoniae
 124 <400> SEQUENCE: 4
 125 Thr Ile Tyr Lys Pro Asp Lys Val Leu Gly Lys Val Ala Val Glu Val
 126 5 10 15
 127 Leu Arg Val Leu Ile Ala Lys Lys Asn Lys Ala Ser Arg
 128 20 25
 129 <210> SEQ ID NO 5
 130 <211> LENGTH: 16
 131 <212> TYPE: PRT
 132 <213> ORGANISM: Mycoplasma hyopneumoniae
 133 <400> SEQUENCE: 5
 134 Ala Glu Gln Ala Ile Thr Lys Leu Lys Leu Glu Gly Phe Asp Thr Gln
 135 5 10 15
 136 <210> SEQ ID NO 6
 137 <211> LENGTH: 14
 138 <212> TYPE: PRT
 139 <213> ORGANISM: Mycoplasma hyopneumoniae
 140 <400> SEQUENCE: 6
 141 Lys Asn Ser Gln Asn Lys Ile Ile Asp Leu Ser Pro Glu Gly
 142 5 10
 143 <210> SEQ ID NO 7
 144 <211> LENGTH: 14

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145 <212> TYPE: PRT
146 <213> ORGANISM: Mycoplasma hyopneumoniae
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153 5 10
154 <210> SEQ ID NO 8
155 <211> LENGTH: 10
156 <212> TYPE: PRT
157 <213> ORGANISM: Mycoplasma hyopneumoniae
158 <400> SEQUENCE: 8
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160 5 10
161 <210> SEQ ID NO 9
162 <211> LENGTH: 21
163 <212> TYPE: PRT
164 <213> ORGANISM: Mycoplasma hyopneumoniae
165 <400> SEQUENCE: 9
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167 5 10 15
168 Trp Val Arg Lys Tyr
169 20
170 <210> SEQ ID NO 10
171 <211> LENGTH: 15
172 <212> TYPE: PRT
173 <213> ORGANISM: Mycoplasma hyopneumoniae
174 <220> FEATURE:
175 <221> NAME/KEY: Unsure
176 <222> LOCATION: (11)
177 <223> OTHER INFORMATION: Undetermined
178 <220> FEATURE:
179 <221> NAME/KEY: VARIANT
180 <222> LOCATION: (12)
181 <223> OTHER INFORMATION: Residue may be Asn or Leu
182 <220> FEATURE:
183 <221> NAME/KEY: VARIANT
184 <222> LOCATION: (13)
185 <223> OTHER INFORMATION: Residue may be Met or Val
186 <400> SEQUENCE: 10
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188 5 10 15
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190 <211> LENGTH: 15
191 <212> TYPE: PRT
192 <213> ORGANISM: Mycoplasma hyopneumoniae
193 <220> FEATURE:
194 <221> NAME/KEY: VARIANT

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195 <222> LOCATION: (4)
196 <223> OTHER INFORMATION: Residue may be Phe or Ile
197 <220> FEATURE:
198 <221> NAME/KEY: VARIANT
199 <222> LOCATION: (5)
200 <223> OTHER INFORMATION: Residue may be Arg or Glu
201 <220> FEATURE:
202 <221> NAME/KEY: VARIANT
203 <222> LOCATION: (7)
204 <223> OTHER INFORMATION: Residue may be Val or Ala
205 <220> FEATURE:
206 <221> NAME/KEY: VARIANT
207 <222> LOCATION: (11)
208 <223> OTHER INFORMATION: Residue may be Gln or Ala
209 <220> FEATURE:
210 <221> NAME/KEY: Unsure
211 <222> LOCATION: (12)
212 <223> OTHER INFORMATION: Undetermined
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214 <221> NAME/KEY: VARIANT
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216 <223> OTHER INFORMATION: Residue may be Met or Asn
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219 5 10 15
220 <210> SEQ ID NO 12
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223 <213> ORGANISM: Mycoplasma hyopneumoniae
224 <220> FEATURE:
225 <221> NAME/KEY: Unsure
226 <222> LOCATION: (3)
227 <223> OTHER INFORMATION: Undetermined
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229 Ala Gly Xaa Leu Gln Lys Asn Ser Leu Leu Glu Glu Val Trp Tyr Leu
230 5 10 15
231 Ala Leu
232 <210> SEQ ID NO 13
233 <211> LENGTH: 20
234 <212> TYPE: PRT
235 <213> ORGANISM: Mycoplasma hyopneumoniae
236 <400> SEQUENCE: 13
237 Ala Lys Asn Phe Asp Phe Ala Pro Ser Ile Gln Gly Tyr Lys Ile
238 5 10 15
239 Ala His Glu Leu
240 20
241 <210> SEQ ID NO 14
242 <211> LENGTH: 12
243 <212> TYPE: PRT
244 <213> ORGANISM: Mycoplasma hyopneumoniae

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Input Set: H913430B.RAW

Line	?	Error/Warning	Original Text
116	W	"N" or "Xaa" used: Feature required	Ala Gly Xaa Gly Gln Thr Glu Ser Gly Ser T
152	W	"N" or "Xaa" used: Feature required	Ala Gly Xaa Trp Ala Lys Glu Thr Thr Lys G
187	W	"N" or "Xaa" used: Feature required	Met Lys Leu Ala Lys Leu Leu Lys Gly Phe X
218	W	"N" or "Xaa" used: Feature required	Ala Asp Pro Xaa Xaa Tyr Xaa Pro Gln Gly X
229	W	"N" or "Xaa" used: Feature required	Ala Gly Xaa Leu Gln Lys Asn Ser Leu Leu G
265	W	"N" or "Xaa" used: Feature required	Leu Leu Lys Ala Glu Xaa Asn Lys Xaa Ile G
281	W	"N" or "Xaa" used: Feature required	acnaacgacg agaagccnca ggc
299	W	"N" or "Xaa" used: Feature required	ttnagcttng tgatngcctg ctc
309	W	"N" or "Xaa" used: Feature required	aggtcgatga tcttccancc